



# Espacenet

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### INFRARED VISIBLE LIGHT CONVERSION LIGHT EMITTING DIODE OF SMALL DIRECTIVITY

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### Abstract of JP7193281 (A)

**PURPOSE:** To remarkably reduce directivity and make possible clear indication in the case of large size, by fixing a fluorescent molded object which dispersedly contains infrared visible light conversion phosphor, so as to keep a specified distance from an infrared light emitting diode.

**CONSTITUTION:** A fluorescent molded object 2 is arranged in the manner in which the inner surface is positioned so as to keep a specified distance, e.g. 1.0mm, from the upper surface of a diode chip 1. For the purpose of protection, the whole part containing the fluorescent molded object 2 is packaged by using a transparent resin mold 7, and conversion light emitting diodes 1-3 are manufactured. A phosphor layer is formed as a dome type fluorescent molded body 2, which is arranged so as to keep a specified distance from the diode chip 1. Thereby the directivity caused by the difference of luminance in the observation direction is reduced, so that clear indication can be obtained.

